

I claim:

1. A method for the on site treatment of infectious wastes such as medical and veterinary wastes, comprising the steps of:

preparing the wastes in view of their ulterior handling and for subsequent treatment by
5 microwave heating,

dividing the wastes in homogenous batches of substantially equal sizes,

sterilizing the waste batches using a heat source generated by microwaves in the range of
0.8 to 9 GHz, said microwaves being conveyed by wave guides,

transporting the sterilized wastes out of the treatment zone, and

10 collecting the wastes to be evacuated.

2. A method according to claim 1, further comprising conveying the microwaves by wave-guides
so as to cause said microwaves to interfere over the waste batches.

3. A method according to claim 1, wherein the step of preparing the wastes further comprises
grinding in an apparatus selected from the group of a granulating grinder, a screw compactor and
15 a blade shredder.

4. A method according to claim 1, wherein the steps of preparing the wastes and dividing the
wastes are combined into a single step.

5. A method according to claim 1, wherein the step of transporting the sterilized wastes is made
aseptically, without exposure to the outside.

20 6. A method according to claim 1, wherein the step of preparing the wastes further comprises
humidifying or wetting the wastes with at least one of water and an aqueous solution.

7. A method according to claim 1, wherein the treatment takes place in a confined manner at a

temperature greater than 160°C and under a pressure greater than 4 bars.

8. A method according to claim 1, wherein each batch is disposed in an individual container.

9. A method according to claim 1, wherein each batch is poured into a cavity.

10. A method according to claim 1, wherein said microwaves are generated by one magnetron
and split into at least parts by wave-guides, in order to cause them to positively interfere over the
batch of waste to be heated.

11. A method according to claim 10, wherein said microwaves are generated by at least two
associated magnetrons with at least two corresponding wave-guides, said magnetrons being
superimposed.

12. A method according to claim 1, wherein said microwaves are generated by at least two
magnetrons generating coherent waves which are then caused to positively interfere by the
wave-guides over the batch of waste to be heated.

13. An apparatus for the implementation of the method for the on site treatment of infectious
wastes such as medical and veterinary wastes, comprising:

a preparation station for the wastes in view of their further handling and for their
subsequent treatment by microwave heating;

a division station where the wastes are divided into homogenous batches of substantially
equal sizes;

a sterilization station where the batches of waste are sterilized by a heat source by means
generating microwaves in the range of 0.8 to 9 GHz, said microwaves being conveyed by wave
guides; and

a removal station for the evacuation of sterilized waste outside the treatment zone.

14. An apparatus according to claim 13, wherein the preparation station and the division station are a single station.

15. An apparatus according to claim 13, further comprising a rotatable platen having at least one cavity for receiving a container presenting, at each rotation, said container to one of said stations.

16. An apparatus according to claim 13, further comprising a sliding drawer containing a cavity and having reciprocal movement into and out of said sterilization station.